CLAIMS:

1. A system for cleaning a workpiece, comprising:

a brush station having brushes for contacting the workpiece and liquid supply for supplying liquid to the workpiece;

a rinser/dryer including a capsule assembly formed by an upper rotor and a lower rotor, with the capsule assembly adapted to hold and spin the workpiece , and the capsule assembly including at least one inlet and at least one outlet; and

a robot moveable to transfer a workpiece from the brush station to the rinser/dryer.

2. The system of claim 1 further including a first inlet in the first rotor for providing a first fluid to an upper surface of the workpiece and a second inlet in the second rotor for providing a second fluid to a lower surface of the workpiece.

3. The system of claim 1 with the at least one outlet positioned to allow escape of fluid from the capsule assembly, by centrifugal force generated by rotating the capsule assembly.

4. The system of claim 1 further including a fluid supply system connected to capsule assembly to sequentially supply at least a rinsing fluid followed by a drying fluid to the capsule assembly.

5. The system of claim 1 where the capsule assembly spins about a vertical axis.

6. The system of claim 1 with the first rotor contained within a head attachable to an elevator, with the head moveable vertically towards and away from the second rotor.

7. The system of claim 1 further including a second brush station including brushes and a liquid supply system.

8. A system for cleaning a workpiece, comprising:

at least one brush station having brushes for brushing a workpiece;

a rinser/dryerincluding:

a first chamber member having an interior first chamber member wall;

a second chamber member having an interior second chamber member wall, the first and second chamber members adapted for relative movement between a loading position in which the first and second chamber members are spaced apart from each other, and a processing position in which the first and second chamber members are engaged to each other, to define a processing chamber;

at least one workpiece support assembly for supporting the workpiece, the at least one workpiece support assembly having a plurality of support members operable to space the workpiece a first distance from the interior first chamber member wall, when the first and second chamber members are in the loading position, and also operable to space the workpiece a second distance from the interior first chamber member wall, when the first and second chamber members are in the processing position, with the first distance greater than the second distance; and

a robot having an end effector for holding a workpiece, with the robot moveable between the at least one brush station and the rinser/dryer, to transfer a workpiece from the brush station to the rinser/dryer.

9. The system of claim 8 wherein the workpiece support assembly in the rinser/dryer comprises:

a biasing member disposed to engage the workpiece support members, the biasing member urging the workpiece support members to space the workpiece at the first distance from the interior first chamber wall when the first and second chamber members are in the loading position, and with relative movement between the first and second chamber members urging the workpiece support members against the bias of the biasing member to drive the workpiece support members to space the workpiece at the second distance from the first interior chamber wall when the first and second chamber members are in the processing position.

10. The system of claim 8 wherein first and second chamber members move linearly together and apart.

11. The system of claim 8 further including at least one fluid inlet disposed through at least one of the first and second interior chamber walls for delivering fluid onto the workpiece when the first and second chamber members are in the processing position.

12. The system of claim 8 where the upper and lower chamber members form a processing chamber generally conforming to the shape of the workpiece.

13. The system of claim 8 further including a plurality of pins on the bottom wall, adapted to hold a workpiece spaced apart from the bottom wall.

14. The system of claim 13 further including a plurality of top spacing members on the top wall, substantially aligned with the pins.

15. The system of claim 13 where spacing members are adjacent to the outlet.

16. The system of claim 8 further including an annular sidewall on the first chamber member extending towards the second chamber member, and with the annular sidewall positioned so that when a workpiece is placed in the chamber, the circumferential edge of the workpiece is spaced apart from the annular sidewall by a distance substantially equal to the thickness of the workpiece.

17. A system for post CMP cleaning of a semiconductor wafer, comprising:

an outside brush station;

an inside brush station;

a rinser/dryer including a first chamber member having an interior first chamber member wall, a second chamber member having an interior second chamber member wall, the first and second chamber members adapted for relative movement between a loading position in which the first and second chamber members are spaced apart from each other, and a processing position in which the

first and second chamber members are engaged to each other, to define a processing chamber;

a first robot moveable between the inside and outside brush stations and the rinser/dryer; and

a second robot moveable between the rinser/dryer and an unload station.